Conclusions: The stenosis in this case seems to have arisen from an hypertrophy of every muscular integer of the pyloric division of the bowel, and probably dates back to a very early period of the child's intra-uterine life.

Discussion.

Dr. R. Langley Porter, San Francisco: The important point to be made is whether these children shall or shall not be operated upon. In consultation, in practice and by the courtesy of friends I have seen seven of these cases within the last two or three years. Four have been operated upon and all are alive and well. Gastro-enterostomies were done in every case and the children are beautiful, strong, well developed infants. The other three died. Another case I know of, treated medically by Doctor Lewitt, is well now after five months. The point to be made is between true stenosis and stenosis of spasm. Much of the symptomatology is due to the spasm of the hypertrophied pylorus. This specimen allowed a sufficient amount of milk to pass through the pylorus to cause good stools. Perhaps Doctor Spalding's case died from starvation more than from pneumonia. I saw this case and I did not advise operation because I thought enough food was passing into the intestines to warrant temporizing. I believe the right procedure is to do gastro-enterostomy immediately. In each of my cases I waited ten days, attempting to feed with fat free milk and the use of lavage. These patients seemed to improve for a time under that treatment and there was some relaxation of the spasm. To sum up, there is a condition appearing at about the third or fourth week in which vomiting, projectile in character, and visible peristalsis are the dominant features. The children are most of them breast fed. In most cases there is a marked contrast between the upper and lower abdomen, the lower abdomen being narrow and shrunken. In neither of these cases was the abdomen definitely shrunken and in both the intestine was functionating. Besides, there are the characteristics of the stool which were absent in both of these cases.

Doctor J. H. Barbat, San Francisco: With regard to waiting too long in these cases, I found, when I was in the East, that a number of pyloric stenosis cases had been operated upon and that most of them died, and were not reported. I found that the majority of cases which had died were children who had been brought to the surgeon too late because the medical man had waited until the child was in extremis. The children who are operated upon early recover, but when the physician delays they are so reduced that operation will kill them. If they are operated upon early enough, as my friend Arbuthnot Lane said, they take the anesthetic like milk and the operation as a joke. I operated upon one child in the morning, and in the afternoon the baby took the breast and never had any trouble. While the operation is beset with some difficulties on account of the small size of the intestines, if a little delicacy is used no trouble will be had.

Doctor A. J. Lartigau, San Francisco: Dr. Spalding has brought forward a subject which is well worth your very serious consideration. It is bound to attract more and more attention and as infants are more carefully studied, the number of reports of these cases will increase. That has been our experience in San Francisco. Though I have seen a number of cases of my own and some belonging to others, and have successfully operated on one such case, I am not prepared to take the extreme view voiced by Dr. Porter, nor am I, on the other hand, willing to take the position of others who believe that an operation is practically never indicated. While the diagnosis of the condition usually presents no difficulties, for the symptoms are clear in most of the cases, nevertheless it will require fine judgment to discriminate between those cases in which operative interference is justifiable and those in which it is not: in other words to distinguish between the so-called spasmodic form of stenosis and the true hyperplastic type. Personally it seems to me that the middle course is the safer. In any case the therapeutic attitude would largely be determined by the individual peculiarities of the case with which one is dealing. I know of no way in which definitely to determine, especially early in the disease, that you are dealing with the spasmodic form or the hyperplastic form, except by watching the case. If you find that the case does not do well by the usual medical treatment, then without waiting too long until the child is too emaciated and weak, surgical interference is probably justified in most instances.

CHYLURIA WITH A VESICAL SINUS.*

By SAXTON POPE, M. D., Watsonville.

I don't know who invented chyluria. My early reading of the Bible leaves no memory of any reference to the subject; not even in the Book of Job. Possibly the Eber's papyrus mentions it but I am not good at Egyptian hieroglyphics.

Whether Hippocrates and Galen dwelt upon the subject I can not tell you. But I have read that Gubler, in 1858, first suggested that chylous urine was due to the passage of chyle directly into the urinary tract and that Wucherer first detected an unknown worm in the urine of a woman at the Misericordia Hospital at Bahia in 1866.

In college and hospital, of course, we heard of this condition but it remained for me to discover it for myself when a Japanese boy walked into my office with a bottle of this characteristic urine in his pocket. One difference between an expert diagnostician and a country doctor lies in the fact that the former thinks first of all the improbable diagnosis and that the latter thinks of the most obvious. So, being a country doctor, when this bottle of milky urine was presented to me, I immediately thought: here is another neurasthenic Jap with a lot of phosphates in his urine; and he is scared to death; he has what they call "shinke" or hypochondriacal introspection.

Here I am minded to quote the great surgeon, Pirogoff: "There are in everyone's practice, moments in which his vision is holden, so that an experienced man can not see what is nevertheless clear, at least I have noticed this in my own case. An overweening confidence and preconceived opinion, rarely a weariness, are the causes of these astonishing mistakes."

I shook the bottle, gazed through it like an ancient urine caster,—lo and behold!—a light broke in upon my weak brain; in my second thought I recognized the specimen as one of chyluria. The urine looked like city milk with a deposit of blancmange in the bottom. It lacked the flocculent eddies that occur in phosphatic urine when shaken.

A hasty examination proved that the fluid was macroscopically homogeneous, creamy white, and

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* Read at the Thirty-ninth Annual Meeting of the State Society, San Jose, April, 1909.

contained shreds of fibrin and a gelatinous coagulum in the bottom of the vessel. The filtrate did not clear upon heating and the addition of acids, but contained an abundance of albumin, nor did an equal quantity of ether clear the solution. The unfiltered liquid microscopically was full of small granules and cells resembling large lymphocytes. No casts, no ova and no parasites were visible.

The Japanese said his name was S. Miamoto, that he was 28 years of age, had been 4 years in this country, was a resident of Monterey and previously had lived 4 years in Hawaii.

The first milky urine appeared in the winter five years ago and had recurred every succeeding winter, lasting about two weeks every time. It was usually only the morning urine that was white and not always clotted. He had never been seriously sick except in infancy when he had what probably was spinal tuberculosis with a psoas abscess. Two years ago he had Rimbyo (gonorrhea) but never had Kasa (syphilis) or Kaki (beri-beri) or any swelling of the legs (Suiki). I made a physical examination which gave no evidence of disease in his heart, lungs, cerebro-spinal axis or abdominal organs.

His upper lumbar vertebra were rigid and slightly kyphotic. There was a slight compensatory lordosis in the lower dorsal. There was an old scar in the left groin which he said marked the site of his abscess in infancy. Save this there was no trouble referable to the original spinal lesion. His lymphatics all seemed normal. There was no edema; no ascites. His genitalia were small, which is characteristic of the Japanese, but showed no abnormality. He said that his sexual function was perfect. Rectal palpation demonstrated the prostate normal in size and consistency, but above it and between the seminal vesicles, leading off to the left side, there was a diffuse induration suggestive of an organized inflammatory exudate. This was not tender. The seminal vesicles seemed normal. I did not strip them nor express the prostatic secretion. No enlarged lymph nodes were to be palpated in the pelvis. His urine passed in the office was clear and free from albumen and glucose. Microscopically it contained a little pus and a few erythrocytes. A blood count proved normal and there were no filariæ present at 11 a. m. or 8 p. m.

The following day he reported for a cystoscopic examination and presented me with another sample of chylous urine. He said that the gelatinous coagulum came out near the last of micturition and gave some pain. I introduced a Bransford-Lewis direct view air cystoscope into the bladder with no difficulty, using distilled water as a dilator in place of air. His bladder was absolutely normal. The ureters were easily found and were seen emitting rhythmical jets of clear urine. I did not catheterize them. The trigonum vesicæ from the level of the ureters down became more corrugated and vascular as it approached the urethra. Withdrawing the cystoscope to the extreme lower angle of the trigon, there was plainly visible the orifice of a sinus whose diameter was about that of a ureteral catheter. The mucosa surrounding this aperture was edematous and covered with a fibrinous exudate. There was no bleeding so I had ample time to allow a creamy white discharge to issue from this sinus and slowly collect in the end of my cystoscope, until it threw the light into a dense fog and obscured the field of vision. I then removed the cap of the tube and permitted the turbid water to flow into a test tube. A later examination of this fluid proved it to be practically identical with the chylous urine.

As a prophylactic measure I gave the patient some hexamethylene tetramine and asked him to return in two days. This he did, saying that his urine was clear. He was requested to come again in a week for further study but he failed to materialize and I have not been able to find him.

Dr. C. M. Cooper of San Francisco made an examination of the urine, but the analysis was incomplete owing to a lack of material. His informal report is as follows: "The urine I allowed to stand, separated into three layers. An upper cream scum of about one-tenth of the depth of the fluid. This scum under the microscope showed globules ranging from about the size of a megaloblast to that of a so-called hemoconium glanules. Shaken up with twice its volume of ether it lost its milky color, the resultant fluid being of a turbid grayish appearance. The middle layer consisted of fluid that was turbid like pale turbid urine and was about seven-tenths by volume of the whole. The fluid contained considerable albumin. The third layer consisted of a curd-like looking deposit, milk white in color, and shaken up with ether it became somewhat grayish while also losing its pure milk color. Microscopically many of the same kind of globules were present, but also granular material, some crystals and some granular cells."

This seems unmistakably a case of chyluria. That no filariæ were found in the blood or urine upon two examinations certainly does not exclude a parasitic origin. Filariasis is not uncommon in Hawaii. The intermissions and the nocturnal occurrence of the chyle are interesting but not unique. In thirty cases collected in literature the intermittent character was present three times. A pelvic or inguinal abscess preceded chyluria twice in this number. The nocturnal filtration corresponds to the case lately reported by Magnus Levy in which chyle appeared at night or only when the patient lay down, issuing in a milky stream from the right ureter. Doubtless both cases permit of a mechanical explanation.

The possibility that an old tuberculous sinus extending from his lumbar vertebræ to the triangle of Scarpa, might in its wanderings have opened some portion of the chyle apparatus, must be considered. The induration posterior to the bladder and the sinus in the trigonum invite a tentative hypothesis that chyle gravitated from a tuberculous erosion of the receptaculum chyli, through the old sinus, strayed down the psoas muscle, followed the ureter to the lowest possible point of retro-peritoneal dissection and inadvertently entered the bladder.

All of which occurred October 5th and 6th in the year of our Lord 1908.

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"THERAPEUTICS."*

By JOHN L. AVEY, M. D., Redlands.

By therapeutics I refer to the therapeutic platform of the regular medical profession, or the use of anything by which we can relieve suffering, or aid any or all of the vital forces of the body to approach nearer the normal; a platform certainly broad enough for any one who has the good of humanity at heart.

The subject of therapeutics therefore is the broadest, the most difficult to master, and the most important of all branches of medical knowledge; for it is the ultimate aim toward which all other lines of medical knowledge converge.

It has been stated. "that in practical therapeutics, whether justly or unjustly, we as a profession stand condemned before the great bar of public opinion."

While I am not willing to fully endorse this statement, yet every physician knows, that with a very large part of the public there is much lack of confidence in much of the applied theapeutics of the regular professior.

This fact is apparent from the flourishing condition of the various ics, ites, isms and pathies, which succeed in evading or gaining the sanction of the law.

Now it is some of the causes which have been instrumental in bringing about this state of affairs that I wish you to consider for a few minutes.

For a number of years it has been common for a considerable number of men in our profession, after years of administering medicine, to publicly express themselves as lacking confidence in the potency of drugs in general, and at the same time to continue administering drugs for the very purposes for which they expressed themselves as believing they were practically useless.

We all know that there has been a growing tendency among men high in the profession along this line and statements of this character appearing in our journals have been copied by the public press.

The result of these expressions, especially those coming from men of known ability, and national reputation, have had much to do with the attitude of the public in this matter.

Most of the results of these nihilistic expressions, so far as my observation goes, we can see along two lines.

First:—They form one more basis for the play of the morbid imagination of the anti-vivisectionists, who say why all this suffering and destruction of life among the lower animals for determining the effects of and the standardiging of medicines when they are of so little value.

Second:—These nihilistic expressions lead the public away from the regular profession into the hands of any ic, ite, ism or pathy, that will promise them relief without the administration of *"strong medicine."* This is an age of marvelous advancement in many lines especially so in the field of medicine, and probably we are on the eve of much greater and more wonderful therapeutic achievements, not however along the lines of the faddists of to-day who take some one truth brought to light as the result of ages of work and thought by the medical profession, or one which in the past has not received as prominent a place in our therapeutics as its power for good would warrant. Not by forcing one such truth or method to cover the greater part of the realm of healing but by recognizing their limitations as well as their possibilities and by giving to each of them its rational place in our therapeutics.

Would Eddyism, Dowieism, or any of the various other faith cure and mind cure fads of to-day be so much in evidence had the medical profession in the past given to suggestion the consideration to which it is entitled?

The Royal Society of Medicine condemned the work of Mesmer in the following language: "Animal magnetism is nothing but the art of making sensitive people fall into convulsions and from a curative point of view is useless and dangerous."

This fiat of the powers has largely dominated the profession for more than two hundred years and few were so bold as to openly make use of suggestion to any great extent after it was officially termed charlatanism.

Again four or five hundred years before Christ, Herodicus reduced bodily exercises and manipulation to a system and made it a branch of medical

* Read before the Thirty-ninth Annual Meeting of the State Society, San Jose, April, 1909.